

### **REMARKS**

Applicants appreciate the detailed examination evidenced by the Final Office Action mailed August 4, 2005 (hereinafter "Final Action") and the Advisory Action mailed November 3, 2005 (hereinafter "Advisory Action"). Applicants further appreciate the courtesy extended by the Examiner during the telephonic interview of November 16, 2005. In response, Applicants have amended Claims 1, 26, 27, 28, 31, and 32 to clarify that the common nonce is provided to the plurality of servers, as suggested by the Examiner. Applicants respectfully submit that such a recitation is not taught by the cited references, as will be discussed in detail below. Also, the arguments from Applicants' Request for Reconsideration submitted October 4, 2004 are incorporated by reference herein. Accordingly, Applicants respectfully submit that pending Claims 1-32 are patentable over the cited references for at least the reasons discussed below.

#### **Interview Summary**

During the telephone interview of November 16, 2005, the present amendments to the claims were discussed with the Examiner. More particularly, in Claim 1, the language "providing the signed common nonce as a signature for transactions from the client to the plurality of servers" has been re-worded to recite "providing the signed common nonce to the plurality of servers as a signature for transactions", to clarify that the signed common nonce itself is provided to the plurality of servers. Claims 26 and 27, which are system and computer program product analogs of method Claim 1, have been similarly amended. Likewise, Claims 28, 31, and 32 have been amended to recite receiving "a common nonce that is provided to each of the plurality of servers". Applicants submit that these amendments are fully supported by the present specification, and as such, no new matter has been added. The reasons for patentability of the amended claims in view of the cited references will be described in detail below.

#### **Independent Claims 1, 26-28, 31 and 32 Are Patentable Over Brezak and Ganesan**

Independent Claims 1, 26-28, 31 and 32 stand rejected under 35 U.S.C. §103(a) as obvious over U.S. Patent Application Publication No. 2003/0018913 to Brezak et al.

(hereinafter "Brezak") in view of U.S. Patent 5,535,276 to Ganesan (hereinafter "Ganesan").

Claim 1 as amended recites:

A method for a middle-tier server to impersonate a client to a plurality of servers, the method comprising:  
obtaining a common nonce associated with each of the plurality of servers from an entity other than the client or the plurality of servers;  
providing the common nonce to the client;  
receiving the common nonce signed by the client at the middle-tier server; and  
providing the signed common nonce to the plurality of servers as a signature for transactions so as to authenticate the client to the plurality of servers.

(*Emphasis added*). Applicants respectfully submit that the combination of Brezak and Ganesan fails to disclose or suggest providing the same common nonce to a plurality of servers in order to authenticate a client to the plurality of servers.

Brezak appears to be directed to controlling delegation of authentication credentials by providing a service ticket including a "forwardable flag" that indicates that the client has authorized the delegation. *See* Brezak, Paragraph 0046. As shown in Figures 2, 3A, and 3B of Brezak, clients **202** and/or **302** may access a plurality of servers **B 212**, **C 214**, and **D 216** via a server **A 210**. *See* Brezak, Figs. 2-3B. More particularly, as described in Brezak, when server **A 210** seeks to access another server on behalf of client **302**:

[S]erver **A 210** sends a TGS\_REQ message **306** to authentication service **206** requesting a service ticket to itself for client **302**. In response, authentication service **206** generates a TGS\_REP message **308** that includes the requested service ticket. The received service ticket is then used in a subsequent S4U2proxy protocol/procedure to request a service ticket to server **C 214** for client **302**.

*See* Brezak, Paragraph 0055 (*Emphasis added*).

Accordingly, Brezak appears to describe an authentication procedure using two service tickets. The first service ticket is received at server **A 210** from the authentication service **206**, and is used to request *another* service ticket to server **C 214**. As such, Applicants submit that even were the service tickets of Brezak to be considered a "common nonce" as recited by Claim 1, nowhere does Brezak appear to disclose or suggest providing the *same* service ticket to *each* of the plurality of servers **A 210**, **B 212**, **C 214**, and **D 216**. Thus, Brezak does not appear to disclose or suggest providing one common nonce, signed or

In re: McGarvey et al.  
Serial No.: 09/921,536  
Filed: August 3, 2001  
Page 11 of 11

otherwise, "to the plurality of servers...so as to authenticate the client to the plurality of servers", as recited by Claim 1 as amended.

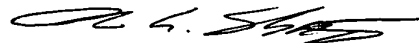
Nor is Ganesan relied upon to disclose such a recitation. Rather, Ganesan appears to be directed to split private key asymmetric cryptography, and is relied upon to show that a message, including a ticket to access a server 50, is encrypted/signed and then verified to authenticate the client to the server 50. See Final Action, Page 3 and Ganesan, Col. 5, lines 34-56 and Col. 15, lines 52-54.

Accordingly, Applicants submit neither Brezak nor Ganesan appear to disclose or suggest "providing the signed common nonce to the plurality of servers", as recited by Claim 1 as amended. Thus, Claim 1 is patentable over the combination of Brezak and Ganesan. Claims 26 and 27 contain similar recitations, and are thus patentable for similar reasons. In addition, Claims 28, 31, and 32 similarly recite receiving "a common nonce that is provided to each of the plurality of servers", and as such, are patentable for at least similar reasons. Also, dependent claims 2-25 and 29-30 are patentable at least per the patentability of Claims 1 and 28 from which they respectively depend.

### **Conclusion**

Accordingly, based on the amendments and remarks provided above, Applicants submit that pending Claims 1-32 are in condition for allowance, which is respectfully requested. Applicants encourage the Examiner to contact the undersigned by telephone to resolve any remaining issues.

Respectfully submitted,



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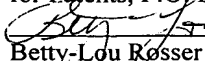
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